

REMARKS/ARGUMENTS

The following rejections were included in the Final Official Action:

Claims 1, 8, and 13-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI (Japanese Unexamined Patent No. SHO-63-234937) in view of MASAMI (Japanese Patent No. 08-163408) and MAEDA et al. (U.S. Patent No. 5,974,109).

Claims 2-4, 10, and 21-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI in view of MASAMI, MAEDA, and LUO (U.S. Patent No. 7,031,549).

Claims 7 and 23-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI in view of MASAMI, MAEDA, and KATO (U.S. Patent No. 7,136,100).

Claims 12 and 25-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYASAKI in view of MASAMI, MAEDA, LUO, and JOGO (U.S. Patent No. 6,940,620).

Claims 27-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI in view of MASAMI, MAEDA, and KAWAGUCHI (Japanese Patent Application No. 03-219738). (Applicant notes that the paragraph 8 heading for this particular rejection incorrectly lists claims 12 and 25-26 as being rejected. However, the description of the rejection only refers to claims 27-29.)

Upon entry of the present amendment, claims 1-4, 8, 10, 12-16, 22, and 25-26 have been amended. Claims 7, 23-24, and 27-29 have been cancelled. Claims 5-6, 9, 11, and 17-20 were previously cancelled. Thus, claims 1-4, 8, 10, 12-16, 21-22, and 25-26 are currently pending for consideration by the Examiner.

Pursuant to M.P.E.P. §714.13, Applicant submits that entry of the present amendment is appropriate because the proposed amended claims avoid the rejections set forth in the Final Official Action, resulting in the application being placed in condition for allowance, or

alternatively, the revised claims place the application in better condition for purposes of appeal to the Board of Patent Appeals and Interferences. Furthermore, Applicant submits that the revised claims do not present any new issues that would require any further consideration or search by the Examiner, and that the amendment does not present any additional claims. Accordingly, entry of the present amendment is respectfully requested.

Applicant submits that the amendment further defines the gamma correction features of each of independent claims 1, 13, and 14, by incorporating a combination of features that were previously recited in various dependent claims. More specifically, amended independent claim 1 includes the features previously recited in now-cancelled dependent claims 7 and 27, and some of the features that were recited in the previous dependent claim 12. Similarly, amended independent claim 13 includes the features previously recited in now-cancelled dependent claims 23 and 28, and some of the features that were recited in the previous dependent claim 25. Further, amended independent claim 14 includes the features previously recited in now-cancelled dependent claim 24 and 29, and some of the features that were recited in the previous dependent claim 26.

Merely in order to expedite the prosecution of the present application to allowance, Applicant has amended each of independent claims 1, 13, and 14 to recite a combination of features that Applicant believes even more clearly patentably distinguishes over any combination of the cited references. Since all of the features added to each of independent claims 1, 13, and 14 come from various dependent claims, which have been previously considered by the Examiner, Applicant respectfully submits that further consideration or search by the Examiner is not required in this particular instance. Thus, Applicant respectfully requests that the

amendment be entered and an indication of the allowability of the pending claims be provided in the next Official communication.

Claims 1, 8, and 13-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over MIYAZAKI in view of MASAMI and MAEDA. Initially, Applicant wishes to convey that Applicant's invention is directed at a special filter, and corresponding method, wherein a "soft focus" image can be made digitally, such as by a digital camera. Applicant's special filter slightly blurs an original image in a specialized manner in order to create the "soft focus" image, which is more aesthetically pleasing to a viewer.

In distinct contrast, the primary reference MIYAZAKI is directed to an endoscope, which is a high precision medical imaging device that is generally used for viewing internal areas of a patient. Applicant submits that in such a medical device, the clarity of the images is of utmost importance. Thus, the enhancement of image contours, i.e., enhancing the clarity of image such as disclosed by MIYAZAKI, is of critical importance to the usefulness of the endoscope. For this fundamental reason, Applicant respectfully submits that one of ordinary skill in the medical imaging arts would not be motivated in any manner to combine features in the other applied references in order to modify MIYAZAKI to *blur* the images so that they are aesthetically pleasing to a viewer. Any such modification to lessen the clarity of a patient's medical image would be viewed as diametrically opposed to the fundamental purpose of an endoscope, and detrimental to the provision of quality patient medical care. The distinctly contrasting purposes of the secondary references is readily evident since they are directed to non-medical imaging purposes, such as for conventional photographic images in a consumer camera, wherein aesthetic attributes of a photographic image are desirable. Accordingly, Applicant respectfully submits

that at least for this fundamental reason, amended independent claims 1, 12, and 13 would not have been obvious to one of ordinary skill in the art, in view of the cited references.

Additionally, Applicant respectfully submits that none of the applied references are directed to the making of a “soft focus” image. For instance, Applicant submits that MIYAZAKI discloses that color signal “S”, as well as luminance signal “Y” and color difference signals “R-Y” and “B-Y”, are generated from “RGB” signals. Applicants also submits that MIYAZAKI’s color signal S undergoes contour enhancement, and is added to the luminance signal “Y”. See MIYAZAKI’s Figure 1, and corresponding description.

Applicant submits that MASAMI discloses that the luminance signal (Y_{in}) is smoothed, i.e., low-pass filtered, along the edge direction of the luminance data for reducing noise, to generate the luminance signal (Y_{ave}). See MASAMI’s Figures 10 and 12. Applicant also submits that MASAMI’s luminance signal (Y_{ave}) is processed to obtain the luminance signal (Y_{out}^d). See MASAMI’s formula (11), and Figures 18-19. Further, Applicant submits that MASAMI’s low-pass filter is not used for obtaining a soft-focus image, but for reducing noise.

Applicant submits that MAEDA discloses that an image is divided into high and low luminance areas P1 and P2. See MAEDA’s Figures 8-9. Applicant also submits that MAEDA’s image signals in each divided area P1 and P2 separately undergo gamma corrections, which are different from each other, order to maintain the luminance balance in the image.

Applicant submits that KAWAGUCHI discloses a circuit that can adjust gamma offset. Further, Applicants submits that KATO discloses that one gamma curve, which is used in gamma correction, is selected from two different gamma curves. See KATO’s Figures 4A and 4B.

Accordingly, Applicant submits that none of the above-cited references disclose, teach, or suggest the making of a “soft-focus” image, and particularly not as explicitly recited in each of amended independent claims 1, 12, and 13.

Furthermore, the Final Official Action acknowledges that neither MIYAZAKI nor MASAMI disclose the gamma correction features of the independent claims. However, the Final Official action asserts that MAEDA discloses this feature. Applicant submits that in MAEDA, the image signals that separately undergo different gamma corrections are the signals in each of the divided areas P1 and P2. In distinct contrast, Applicant submits that in independent claims 1, 12, and 13, the *original image data* undergoes the gamma correction, and not the set of signals in each divided area, as disclosed in MAEDA. For at least this reason, Applicant submits that MAEDA fails to disclose gamma correction as recited in the independent claims. Applicant also submits that none of the other cited references disclose this particular gamma correction feature, as recited in the claimed combination.

Nevertheless, as stated previously, Applicant has amended independent claims 1, 12, and 13 to recite additional patentable features merely in order to expedite the prosecution of the present application to allowance. More specifically, each of amended independent claims 1, 12 and 13 recite that the *second gamma curve is selected from a stepwise series of predetermined resolutions*. Applicant also submits that each of amended independent claims 1, 12, and 13 have also been amended to explicitly recite that *said first gamma curve has a zero offset, and said second gamma curve has a non-zero offset*. Applicant submits that these particular features result in the claimed *third luminance data* being more flared, such that the claimed *synthesized image data* comprises a more natural “soft-focus” image. See Applicant’s Figure 4 and corresponding description at specification page 14, line 15, to page 16, line 14.

Furthermore, Applicant submits that amended independent claims 1, 12, and 13 each further recite that the *second gamma curve is changed so as to change the extent of the soft focus of said soft focus image*. This particular feature points out that by changing the selection of the second gamma curve, that the extent or degree of the soft focus is correspondingly changed, according to the preference of the user. See Applicant's specification page 16, lines 8-14.

For at least each of the reasons discussed above, Applicant respectfully submits that neither the combination of applied reference, nor any permissible combination of cited references, disclose, teach, or render obvious the specific combination of features recited in amended independent claims 1, 12, and 13. Applicant further submits that the claims that depend upon one of amended independent claims 1, 12, and 13, are patentable for at least the reasons discussed above, and further for the additional features recited therein. Accordingly, Applicant respectfully requests that the rejection of claims 1-4, 8, 10, 12-16, 21-22, and 25-26 under 35 U.S.C. § 103(a) be withdrawn.

In addition to the reasons discussed above, Applicant respectfully submits that the Final Official Action has impermissibly pieced together multiple distinct references in formulating the various rejections, sometimes piecing together four and five references at a time. Applicant submits that the piecemeal manner used in formulating the resulting rejections was apparently based upon impermissible hindsight reasoning, and appears to have used Applicant's disclosure as a guide. Applicant submits that this piecemeal approach is evident since the Final Official Action has failed to provide a convincing line of reasoning as to why one of ordinary skill in the art would have combined the applied references in the manner asserted.

Applicant also submits that the obviousness rationale to combine the multitude of applied references asserted in the Final Official Action is improper because the rationale *is contrary to*

the knowledge that was within the level of ordinary skill in the art at the time of the invention, and was based on the description of the invention provided in Applicants' disclosure, for at least the reasons discussed above. As previously discussed above, Applicant submits that one of ordinary skill or working in the medical imaging arts would not be motivated to combine the features in the other applied references in order to modify MIYAZAKI to *blur* the images so that they are aesthetically pleasing to a viewer. Any such modification to lessen the clarity of the patient's medical image would be viewed as diametrically opposed to the fundamental purpose of an endoscope, and detrimental to the provision of quality patient medical care. Thus, Applicant submits that one of ordinary skill in the art at the time of the invention would not have modified MIYASAKI in the manner asserted in the Final Official Action.

SUMMARY

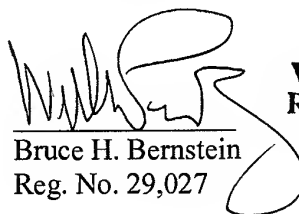
Based upon the amendments, arguments, and remarks provided above, Applicant submits that all of the pending claims in the present application are patentable over the references cited by the Examiner, either alone or in any proper combination. Accordingly, reconsideration of the outstanding Final Official Action is respectfully requested and an indication of allowance of claims 1-4, 8, 10, 12-16, 21-22, and 25-26 is now believed to be appropriate.

Applicant notes that this amendment is being made to advance prosecution of the application to allowance, and should not be considered as surrendering equivalents of the territory between the claims prior to the present amendment and the amended claims. Further, no acquiescence as to the propriety of the Examiner's rejections is made by the present amendment. All other amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Applicant notes that the status of the present application is after final rejection and that once a final rejection has issued, an Applicant does not have a right to amend an application. Nevertheless, in the present situation, Applicant respectfully submits that entry of the present amendment is appropriate and proper, and in full compliance with 37 C.F.R. §1.116, as described above. Accordingly, Applicant again respectfully submits that the present amendment raises no issues requiring further consideration or search, and thus, should be entered by the Examiner.

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,
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